AGT S ACT T GTA V GCC A GAC D ACC T GTT GCC AAG (V A K V CTG GCC L A GGA AAT GCT G AAT N ATG AAA M K AAA K GCT A CCA P ACC (T CCG P $_{
m L}^{
m CTG}$ ACT T ATG M ACT CTA T $\begin{array}{c} \mathtt{TAT} \\ \mathtt{Y} \end{array}$ TGC GCT A TAC AAG ' CGC R TCC S GTT V AAG K GAA E TTG . . . 9 9 ATC I AAC N TTC GCA CGC GCT CAG CTT AC
F A R A Q L S
91/31

\text{MGC GAT ATC TCT CAG GA1}

\text{MG GAT ACC GAC ATC AAC
K D T D I N
211/71

\text{GCG TCT GGT GGT ACC
AC GAC ACT
K D T D I N
211/71

\text{GCG TCT GGT GGT ACC
AC GAC ACT
AC GAC ACC
AC GAC ACT
AC GAC ACT
AC GAC ACT
AC GAC ACT
AC GAC ACC
AC GAC ACC
AC GAC
AC CCG P ACT TTC GAG E CTG AGC S ACC GCT A GCC A GAA E GTG V ATC I CCT P ACT TGG T W GCA A ACT T ACC T AAA K 299 299 ACC T ACC ACT T ACG T GAG GGT E G GCA A 299 3 GCT A GCT A ${\tt TAC} \\ {\tt Y}$ AAG K ACG T GGT G GTG V TCT ACT T 1/1 GCG CTC A L 61/21 GGT CTC G L 121/41 GCT GCC A A 181/61 ACA ACT T T 241/81 TCT GAT S D 301/101 AAG GGT K G 361/121 TGC CAG

Fig. 1A

AAT ACA T AAA K ACT T ACT T GGT G GCT AAC A GCT TCG GTC A S V GGT GCA GAT ATC ACT TTG A D I T L CGT R GAG CAG TTT ATT CCG AAA E Q F I P K AAG AGC (K S (CTG ACT (GAT D TCT GCT CTT (AGC GTG AS V GCG GCA ATT ACC I T TGG W ACT GTG V ATT I GCA A GGT gg. . . AAA K AAG TGC ACC AGT GAT CAG GAT K C T S D Q D 31/11
C GCT CGT TCG GAA GGC G
A R S E G A
91/31
A GAG GCG CTT TCT CGT G
E A L S R G
151/51
G AAA GAG GTT CCT CTG GG
K E V P L G
211/71
A CCC GAT CCT GCT GCT
P D P A D G CCG AAG AAT AAA GGG P K N K G 331/111 TTC GCT CGT TCG F A R S GAA GAG GCG CE AAA (K AAG K GGA G GCT ACT A GAA E GCA CTC A GTT V CTC TGG ATG GGC GGT GCA M G G A ACC T ACC GAG GGT 1 E G AAG ACT K T GAC D GGT G GAG (GAT D 1/1
GCG CTC (
A L |
61/21
CCG TTG |
P L |
121/41
GGT ACA (
G T |
181/61
CTG GGT |
L G S41/81
TTC ACT |
F T | 301/101 GCA GCT A A

Fig. 1B

: AAC N	AAA K	AAC N	ACC T	ACT	TCT
ATC	ATT I	GCC	TTT F	CGT R	GGT
ACG	AAA K	GAT D	ACC	AAC N	AAA K
GCG	AGC S	CCG P	ATT	$ ext{CTG}$	CCG
CTG	GGT G	GAG E	GAT D	ACT T	ACT T
GCG	GCT A	GTC V	GGT G	ATC ACT I T	TTC
TCG		GGC	GCG A	GTT V	ATG M
GCT	GGA G	GCC	GGT	AA.	90
31/11 G GAA GGT (E G / 91/31	TCG CGT S R 151/51	ACA TAT T Y	GAT AGT D S 271/91	GCT ACT A T 331/111	CAG GAT 2 D
TCG	Ĕ	75 C		AA1 N	ACC
CGT R	TCG S	CG ACC C	ATC I	AAG K	TCT
GCG A	GAG E	Ö &	დ ≰	CCC	AAA K
TTC	GAA E	ACT T	GTA V		TGT
GAA E	GTT V	TCT			GCT A
ACC	ACT T	GCT A			TGG W
GGT G	ACC T	ACT T	GTA V	GGT G	GTC V
GAG E	AAG K	ACT T	GGT	ACT	<u>ე</u>
1/1 GCG CTC A L 61/21	CCG CTG P L 121/41	ATT GGT I G 181/61	AAG TTG K L 241/81	TTC CAG F Q 301/101	GCG GAT G A D G 361/121 GAT AAC D N

Fig. 1C

AGC	GCG A	TCT	ACC T	AAT N	GCT A	
GTC	AGC S	GGT G	GCT A	AAA K	TAC Y	
GAA	TCC	GAT D	GTC V	CGT R	AAC N	
AGT S	GTT V	CTA L	${ m TTG}$	TCG S	CCC P	
GTG V	ATT I	TTG L	GAG E	GTT V	AAG K	
GCC	GAG E	ACT T	GTT V	ACT T	TGG W	
CGT R	AAG K	TCT S	GGC ACC G T	ATC I	GCT A	
ACC T	999	GAG E	9 9	GTA V	ACA T	
11 GTG V 31	GAA E	ACC T	GAT D '91	GCT A '111	CCT P	
31/11 CAG GTG A Q V T 91/31	CTG L	TTC F 211/	AAA K 271/	GGG G 331/	ACT T	
ACC T	ATT I	9 9	T D N	AAA K	AAA K	
CGT R	GCG A	ATT I	GAC D	ATC I	ACC T	
GCC	TCG	GAC D	ACG T	GCC A	ATC I	
TTC	GAG E	TAT Y	GTA V	TCC	AAA K	TCC
GAA E	GCT GCG A A	CAG Q	ATC CAG I Q	GGT G	TGC	AAT N
ACC (GCT A	ACC	ATC I	TCT S	AAC N	CCG P
	ACC T	GAT D	CAG Q	TCT S		TGC
GAG E	AAG K	AAA K	AGT S	AAA K	GTC V	AAT N
CTC L	CTG L	CCT P 61	AAG K 81	GGT G 101	GGA G 121	GCT A
1/1 GCG CTC A L 61/21	GCG A 121/	ACT T 181/	GGT G 241/	TTG L 301/	GAC D 361/	CCG P

Fig. 1D

1/1										31/1	_									
929	CTC	GAG	GGT	ACC	GAA	$_{ m TTC}$	TCT		TCT	CAG	GTC	ICC	AGG	\mathtt{GTT}	ATG	909	GAG			
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TCT	CAA	ACC	CIG	CCA	ACC	AAT	ACC		GTT	SCG	CAG	3TT	CTG						447	
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241,	/81)		271/	9. 91	•	3	۵	4				יכ	
ACC	ACT	ATC	ATT	929	ACT	TTT	GGT		ggc	GCA	JCC	3CA	GCT						ن ال	
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ACC	$^{ m LGG}$	ACT	CGT	GAT	GTT	AAT	GGT		TGG	AGC	TGT	3CT	ACT		GTA				THT.	
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CGT	CCI	AAT	299			GAC														
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Fig. 1E

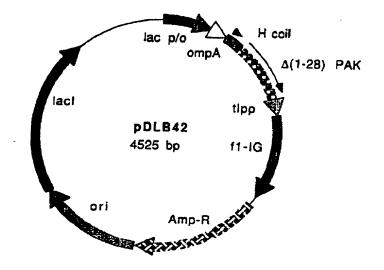


Fig. 2A

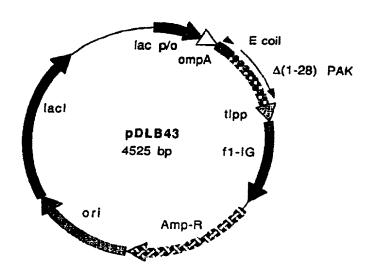


Fig. 2B

116/11 greg etc gag cae cat cat cae cat ggt ggt gge gag att gag gee etc aag get gaa A L E H H H H G G G G B I B A L K A B 176/31 ate gas gee eta asg gee gag ata gas ges ett asg ges gag ate gag geg eta asa geg I B A L K A E I B A L K A B I E A L 236/51 gas ata gag get etg sag ges gge ggt ggs gas tte GCT CGT TCG GAA GGC GCA TCT E I E A L K A G G G E F ARSEGAS 266/61 296/71 GCT CTT GCT TCG GTC AAT CCG TTG AAG ACT ACC GTT GAA GAG GCG CTT TCT CGT GGT TGG ALASVNPLKTTVEEALSRGW 356/91 AGC GTG AAG AGC GGT ACA GGT ACA GAG GAC GCT ACT AAG AAA GAG GTT CCT CTG GGG GTG S V K S G T G T E D A T K K B V P L G V 386/101 416/111 GCG GCA GAT GCT AAC AAA CTG GGT ACT ATC GCA CTC AAA CCC GAT CCT GCT GAT GGT ACT A A D A M K L G T I A L R P D P A D G T 446/121 476/131 GCA GAT ATC ACT TTG ACT TTC ACT ATG GGC GGT GCA GGA CCG AAG AAT AAA GGG AAA ATT ADITLTFTMGGAGPKNKGK 506/141 536/151 ATT ACC CTG ACT CGT ACT GCA GCT GAT GGT CTC TGG AAG TGC ACC AGT GAT CAG GAT GAG I T L T R T A A D G L W K C T S D Q D E 566/161 CAG TIT ATT CCG AAA GGT TGC TCT AGG Q F I P K G C S R

Fig. 3A

DNA sequence 613 b.p. ttctagataacg ... AAGAAGCTTGGG linear

86/1 116/11 176/31 gtt tet get ete gaa asa gag gte agt get etg gaa aaa gag gtg tea gee ttg gaa aag V S A L E K E V S A L E K E V S A L E K 236/51 296/71 GCT CTT GCT TCG GTC AAT CCG TTG AAG ACT ACC GTT GAA GAG GCG CTT TCT CGT GGT TGG A L A S V N P L K T T V E E A L S R G W 326/81 356/91 AGC GTG AAG AGC GGT ACA GGT ACA GAG GAC GCT ACT AAG AAA GAG GTT CCT CTG GGG GTG S V K S G T G T E D A T K K E V P L G V 386/101 416/111 GCG GCA GAT GCT AAC AAA CTG GGT ACT ATC GCA CTC AAA CCC GAT CCT GCT GAT GGT ACT A A D A N K L G T I A L K P D P A D G 476/131 GCA GAT ATC ACT TTG ACT TTC ACT ATG GGC GGT GCA GGA CCG AAG AAT AAA GGG AAA ATT A. D I T L T F T M G G A G P K N K G K I 506/141 536/151 ATT ACC CTG ACT CGT ACT GCA GCT GAT GGT CTC TGG AAG TGC ACC AGT GAT CAG GAT GAG I T L T R T A A D G L W K C T S D Q D E 566/161 CAG TTT ATT CCG AAA GGT TGC TCT AGG QFIPKGC

116/11 gog etc gag cae cat cat cae cat ggt ggt ggt gge gag att gag ges etc aag get gaa A L B H H H H G G G G E I B A L K A B 176/31 ate gaa gee eta aag gee gag ata gaa gea ett aag gea gag ate gag geg eta aaa geg 206/41 236/51 296/71 CGC ATG ACC CTG GCC AGT GGT CTC AAG ACG AAA GTG AGC GAT ATC TTC TCT CAG GAT GGG R M T L A S G L K T K V S D I F S Q D G 326/81 356/91 TEC TEC CEG CET ANT ACT CET GEC ACG GEA GGC ATC GAG AAA GAT ACC GAC ATC AAC GGC S.C.PANTAATAGIEKDTDING 386/101 416/111 AMG TAT GTT GCC AMG GTA ACA ACT GGT GGC ACC GCA GCT GCG TCT GGT GGT TGC ACT ATC K Y V A K V T T G G T A A A S G G C T I 446/121 476/131 GTT GCT ACT ATG AAA GCC TCT GAT GTG GCT ACT CCT CTG AGG GGG AAA ACT CTG ACT TTG V A T M K A S D V A T P L R G K T L T L 506/141 536/151 ACT CTA GGA AAT GCT GAC AAG GGT TCT TAC ACT TGG GCC TGT ACT TCC AAC GCA GAT AAC TLGNADKGSYTWA 596/171 566/161 ANG TAC CTG CCA ANA ACC TGC CAG ACT GCT ACC ACT ACC ACT CCG KYLPKTCQTATTTP

Fig. 4A

DNA sequence 631 b.p. ttctagataacg ... AGCAAGCTTGGG linear

116/11 86/1 gog etc gag cac cat cat cac cat ggt ggt ggc gag gta too get tta gag aaa gaa A L E H H H H G G G G E V S A L E K E 176/31 146/21 gtt tot got etc gen ann gag gtc agt get etg gan ann gag gtg ten gee ttg gan ang V S A L E K E V S A L E K E V S A L E K 235/51 gas gts tes ges ett gag sag gge ggt ggs ggs gas tte GCA CGC GCT CAG CTT AGC GAA R V S A L E X G G G G E F A R A Q L S 296/71 266/61 CGC ATG ACC CTG GCC AGT GGT CTC AAG ACG AAA GTG AGC GAT ATC TTC TCT CAG GAT GGG RMTLASGLKTKVSDIFSQDG 356/91 326/91 TOO TOO COG GOT AAT ACT GOT GOO ACG GOA GGO ATC GAG AAA GAT ACC GAC ATC AAC GGO S C P A N T A A T A G I E K D T D I N G 415/111 386/101 AAG TAT GTT GCC AAG GTA ACA ACT GGT GGC ACC GCA GCT GCG TCT GGT GGT TGC ACT ATC K Y. V A K V T T G G T A A A S G G C T 476/131 446/121 OTT GCT ACT ATG ANA GCC TCT GAT GTG GCT ACT CCT CTG AGG GGG ANA ACT CTG ACT TTG V A T M K A S D V A T P L R G K T L T L 536/151 506/141 ACT CTA GGA ART GCT GAC ARG GGT TCT TAC ACT TGG GCC TGT ACT TCC ARC GCA GRT ARC T L G N A D K G S Y T W A C T 8 N A D N 566/161 596/171 566/161 AAG TAC CTG CCA AAA ACC TGC CAG ACT GCT ACC ACT ACC ACT CCG KYLPKTCQTATTTP

86/1 116/11 geg etc gag cac cat cat cac cat ggt ggt ggt ggc gag att gag gec etc aag get gaa ALBHHHHGGGGETEALKAB 146/21 176/31 ato gaa goo ota aag goo gag ata gaa goa ott aag goa gag ato gag gog ota aaa gog I B A L K A B I E A L K A E I E A L K A 206/41 236/51 gas ata gag get etg aag gea gge ggt gga gga gas tte GCG CGT TCG GAA GGT GCT TCG BIBALKAG G G B F A R S 296/71 GCG CTG GCG ACG ATC AAC CCG CTG AAG ACC ACT STT GAA GAG TCG CTG TCG CGT GGA ATT A L A T I N P L K T T V E E S L S R G I 326/81 356/91 GCT GGT AGC AAA ATT AAA ATT GGT ACT ACT GCT TCT ACT GCG ACC GAA ACA TAT GCC GGC AGSKIKIGTTAST ATETYAG 386/101 416/111 GTC GAG CCG GAT GCC AAC AAG TTG GGT GTA ATT GCT GTA GCA ATC GAA GAT AGT GGT GCG V E P D A N K L G V I A V AIRDS 446/121 476/131 GGT GAT ATT ACC TTT ACC TTC CAG ACT GGT ACC TCT AGT CCC AAG AAT GCT ACT AAA GTT G D I T F T F Q T G T S S P K N A T K V 506/141 536/151 ATC ACT CTG AAC CGT ACT GCG GAT GGG GTC TGG GCT TGT AAA TCT ACC CAG GAT CCG ATG I T L N R T A D G V W A C K S T Q D P M 566/161 TTC ACT CCG AAA GGT TCT GAT AAC PTPKGSDN

Fig. 5A

DNA sequence 610 b.p. ttctagataacg ... CGAAAGCTTGGG linear

86/1 115/11 gdy ctc gag cac cat cat cac cat ggt ggt ggt ggc gag gta tcc gct tta gag aaa gaa A L. E. H. H. H. G. G. G. E. V. S. A. L. E. K. E. 146/21 176/31 git tot get etc gas ass gag gic agt get etg gas ass gag gig tes gee tig gas asg V S A L E K E V S A L E K E V S A L E K 236/51 gaa gta toa goa ott gag aag ggo ggt gga gga gaa tto GCG CGT TCG GAA GGT GCT TCG B V S A L E K G G G E P A R S E G A S 266/61 296/71 GCG CTG GCG ACG ATC AAC CCG CTG AAG ACC ACT GTT GAA GAG TCG CTG TCG CGT GGA ATT A L A T I N P L K T T V E E S L S R 326/81 356/91 GCT GGT AGC AAA ATT AAA ATT GGT ACT ACT GCT TCT ACT GCG ACC GAA ACA TAT GCC GGC A G S K I K I G T T A S T A T E T Y A G 386/101 415/111 OTC GAG CCG GAT GCC AAC AAG TTG GGT GTA ATT GCT GTA GCA ATC CAA GAT AGT GGT GCG V E P D A N K L G V I A V AIRDSGA 446/121 476/131 GOT GAT ATT ACC TIT ACC TIC CAG ACT GGT ACC TCT AGT CCC AAG AAT GCT ACT AAA GTT G D I T F T F Q T G T S S P K N A 506/141 536/151 ATC ACT CTG AAC CGT ACT GCG GAT GGG GTC TGG GCT TGT AAA TCT ACC CAG GAT CCG ATG I T L M R T A D G V W A C K S T Q D P M 566/161 TTC ACT CCG, AAA GOT TCT GAT AAC F T P K G S D N

INDUCED CELL CULTURES

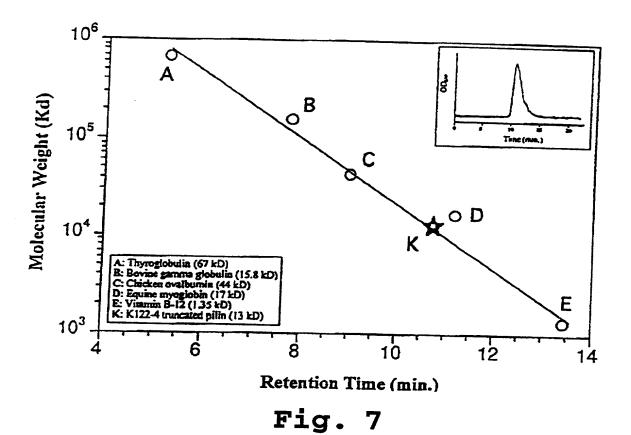
EXTRACTION OF PERIPLSMIC PROTEIN BY OSMOTIC SHOCK PROCEDURE

ION EXCHANGE CHROMOTOGRAPHY ON CARBOXYMETHYL CELLULOSE

SIZE EXCLUSION CHROMOTOGRAPHY WITH SEPHADEX G 75

CHARACTERIZATION OF PURIFIED PROTEIN

Fig. 6



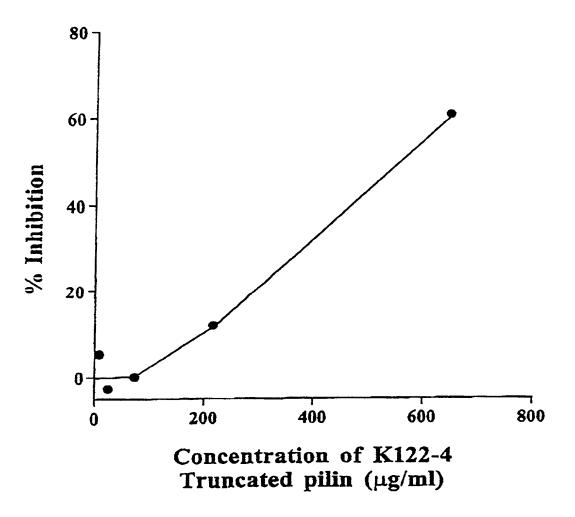


Fig. 8

